Application No. <u>10/720,220</u>

Amendment dated June 2, 2006

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IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

(Original) A gain-clamped optical amplifier comprising:

optical reflection means installed on an input optical fiber or an output optical fiber; optical anti-reflection means installed on the optical fiber opposite to the optical fiber having the optical reflection means installed on; and

an optical amplifier located between the optical reflection means and the optical antireflection means, for amplifying an input signal or an output signal,

wherein an amplified spontaneous emission light emitted from the optical amplifier to the input optical fiber and the output optical fiber is reflected by the optical reflection means and amplified in the optical amplifier.

- 2. (Original) The gain-clamped optical amplifier of claim 1, wherein the optical reflection means is one or more optical fiber Bragg gratings installed on the input optical fiber or the output optical fiber.
- 3. (Withdrawn) The gain-clamped optical amplifier of claim 1, wherein the optical reflection means is one or more waveguide type Bragg gratings directly engraved on an input optical waveguide or an output optical waveguide of the optical amplifier.
- 4. (Withdrawn) The gain-clamped optical amplifier of claim 1, wherein the optical reflection means is comprised of a wavelength division multiplexer and a mirror installed at an end of the wavelength division multiplexer.

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5. (Original) The gain-clamped optical amplifier of claim 1, wherein the optical antireflection means is an isolator.

6. (Withdrawn) The gain-clamped optical amplifier of claim 1, wherein the optical anti-reflection means uses an optical fiber having a section of the output optical fiber coated for anti-reflection.

7. (Withdrawn) The gain-clamped optical amplifier of claim 1, wherein the optical anti-reflection means uses an optical fiber having a core section of the output optical fiber cut slantingly.

8. (Original) The gain-clamped optical amplifier of claim 1, wherein the optical amplifier is a semiconductor-optical amplifier.

9. (Withdrawn) The gain-clamped optical amplifier of claim 1, wherein the optical amplifier is an erbium-doped optical fiber amplifier.

10. (Withdrawn) The gain-clamped optical amplifier of claim 1, wherein the optical amplifier is a rare earth ion doped optical fiber amplifier optically pumped.

Claims 11-17 (Canceled)